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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,506	06/26/2007	Takashi Sawaguchi	0003187USU	2329

27623 7590 05/06/2010  
OHLANDT, GREELEY, RUGGIERO & PERLE, LLP  
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STAMFORD, CT 06901

EXAMINER
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REDDY, KARUNA P

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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05/06/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Attachment to Advisory Action******Response to Arguments***

1. Applicant's arguments filed 4/26/2010 have been fully considered but they are not persuasive. Specifically, general thrust of applicant's argument is that Pope et al do not teach the claimed nano silica - phase dimension of 100 angstroms is misinterpreted by the examiner as nano silica because phase dimension of 100 angstroms are not larger than the average pore diameter of 156 angstroms; and phase dimension appears to be referring to the pore diameter which is verified by the phase dimension of approximately 150 angstroms (page 1020 of Pope) which is almost equal to 156 angstroms for pore diameter disclosed on page 1019 of Pope et al.

In response, firstly, applicant's attention is drawn to Pope et al, wherein it states "glass fiber re-inforced epoxy, for example, typically utilizes fibers of 5 to 20 microns in diameter, and often many meters in length. These large "phase dimensions" result in light scattering. ....in our composites, however, the phase dimensions are on the order of 100 angstroms". It is clear that phase dimensions in the composite in Pope et al are made in conjunction with the dimensions of prior art fiber re-inforced epoxy. Hence, it is the examiner's position that phase dimensions in the composite in fact refer to the dimensions of the silica particle and not the pore diameter. Furthermore, phase dimensions in the composite of Pope et al are not just 100 angstroms but on the order of, which to one skilled in art indicates that phase dimensions are in the neighborhood of 100 angstroms, supported by the statement -"reason these composites are transparent

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is primarily due to the ultrafine phase dimensions of approximately 150 angstroms" (page 1020, col. 1, lines 28-30 of Pope et al).

Secondly, the pore diameter in Pope et al is "average pore diameter of 156 angstroms" and ultrafine phase dimensions of the composite are approximately 150 angstroms. Hence, it is clear that pore diameter is an average pore diameter and ultrafine phase dimensions of approximately 150 angstroms are an approximate dimension. Hence, it is the examiner's position that phase dimension in Pope et al refers to the particle size (i.e. nano silica) and not pore diameter.

/K. P. R./  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796